

REMARKS/ARGUMENTS

1. Claim Amendments

The Applicant has amended claims 20, 27, 35, 37 and 39 and claim 40 has been canceled. Applicant respectfully submits no new matter has been added. Accordingly, claims 20-39 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2. Examiner Objections – Claims

Claims 1, 33-35, 37 and 29 were objected to because of the following informalities: the undefined use of the term "XML". The Applicant appreciates the Examiner's thorough review of the claims. The Applicant has amended the claims as suggested by the Examiner in order to correct the informalities. The Examiner's consideration of the amended claims is respectfully requested.

Claims 27-28 were objected to because of the following informalities: the undefined use of the terms "ROM" and "RAM". Again, the Applicant appreciates the Examiner's thorough review of the claims. The Applicant has amended the claims as suggested by the Examiner in order to correct the informalities. The Examiner's consideration of the amended claims is respectfully requested.

Claims 35 and 40 were objected to because of the following informalities: the dependencies of the claims are incorrect. Again, the Applicant appreciates the Examiner's thorough review of the claims. Claim 40 has been canceled. The Applicant has amended claim 35 as suggested by the Examiner in order to correct the informality. The Examiner's consideration of the amended claims is respectfully requested.

3. Claim Rejections – 35 U.S.C. §101

The Examiner rejected claims 39-40 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claim 39 has been amended to overcome the rejection. Claim 40 has been canceled.

4. Claim Rejections – 35 U.S.C. § 102(b)

Claims 1-20, 22-32, 36-37, and 39-40 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ferris (US 2003/0008684; Cited in IDS). The Applicants have cancelled independent claim 40 rendering the rejection of that claim moot. The Applicants respectfully traverse the rejection of the remaining claims.

The present invention is a radio base station comprising a monitor; a memory, the memory being connected to the monitor and arranged for storing tasks and data; and one or more resources, each of the resources being connected to the monitor and arranged for at least one of performing a function and executing a program, wherein the tasks are stored in an XML format. Ferris provides:

A digital wireless base station programmed with a hardware abstraction layer suitable for enabling one or more baseband processing algorithms to be represented using high level software. XML is only referred to in Ferris in paragraph [0042], as noted below, in a context entirely unrelated to the present invention.

First of all, XML is not a high level programming language. XML is not even a programming language—rather it is used to provide tagged text documents. In XML, document type definitions (DTD's) define a tag structure and based on that template one creates an XML tagged text document comparable to a text document that would define a program when using a high level programming language (HLPL) as ADA, C++, and the like.

The difference between XML and HLPL is that before a HLPL text document can be used as a program in a base station, it must first be compiled, linked with a specific resource environment of a single target base station and then has to be altered to become a loadable object for that base station. Such is not the case with respect to the present invention. In the present invention, the XML text document is directly stored in the

memory as it was created. The XML enabled base station interprets the XML directly and no compile link and load stages are required. This has significant advantages over the use of a HLPL for, *inter alia*, debugging as one sees the actual defining text going by when processed.

Hence the present invention includes advantages of HLPL without the disadvantages of compile/link/load. Further, the present invention does not require the use of advanced/expensive debugging tools as the memory contains a readable text format which can be followed during execution.

The Examiner states that the element of wherein the tasks are stored in a memory in XML format is found in paragraphs 4, 7, 16, 42 and 44 of Ferris. Only paragraph 42 refers to the use of XML, and it does so in a context unrelated to the present invention. Ferris discloses APIs that may use XML to connect with and utilize the features of an overall wireless network. It does not disclose the use of XML specifically for base station operations. The use of external APIs for access into a wireless network are entirely unrelated and irrelevant to resources connected to a monitor in a base station for performing functions and executing programs using tasks stored in XML. The paragraphs of Ferris cited by the Examiner are as follows (the added emphasis points to the use of HLPL not XML in a base station):

[0004] Digital radio standards (such as UMTS) are however so complex and change so quickly that it is becoming increasingly difficult to apply these conventional hardware based design solutions. The inflexibility of current digital wireless communication base station designs can be seen in the starkest contrast if one moves to the non-analogous arena of the Pc. The PC offers an appropriate set of hardware resources (screen, memory, processor, keyboard etc), wrapped up in a hardware abstraction layer (the Windows™ virtual machine), sufficient to meet the demands of a wide range of applications, which may then be developed entirely using high-level software. There are many benefits to solving application needs in software-it is fast to produce, relatively cheap to develop (allowing a wide number of players to enter the market, generating competition), and the end product has an almost zero distribution and storage cost.

[0007] In a first aspect of the invention, there is a digital wireless communications base station programmed with a virtual machine layer suitable for baseband signal processing. The virtual machine layer is suitable for enabling one or more baseband processing data flows to be represented using high level software, calling through for high-MIPs functions to underlying 'engines'.

[0016] The virtual machine layer supports underlying high MIPs algorithms common to a number of different baseband processing algorithms, and makes these accessible to high level, architecture neutral, potentially high complexity but low-MIPs control flows through a scheduler interface, which allows the control flow to specify the algorithm to be executed, together with a set of resource constraint envelopes, relating to one or more of: time of execution, memory, interconnect bandwidth, inside of one or more of which the caller desires the execution to take place.

[0042] A set of control APIs is available by means of which data and software providers can 'hook into' the UMTS network. The point of this enterprise is that, although the whole 3G development has supposedly been driven by the needs of data (higher bursty bandwidth for IP packet data across increasingly flat backhaul cores), in fact it is rather difficult, as a software or data vendor, to make use of the facilities offered by the underlying network. To this end, RadioScape's APIs provide an open, COM (Component Object Model), XML (Extensible Mark-up Language) and SNMP (Simple Network Management Protocol)-based system by means of which external programmers may connect with and utilise the features of the wireless net. Through the use of 'drivers' this framework may be implemented over any high-bandwidth network (e.g., CDMA-2000, Bluetooth, etc.) and may also be implemented for any vendor's implementation of a UMTS 3G network. As noted above, the RF interface (control, timing synchronization and digitised IF) will be completely open and published by RadioScape, hence 'shopping around' for the best RF provider will become a reality for network providers utilising the GBP paradigm.

In *Net MoneyIn v. Verisign* (Fed. Cir. 2008), the Federal Circuit stated that holding that anticipation takes more than simply locating each element within the four corners of a single document. To anticipate, the prior art must teach all the claim elements and the claimed arrangement. Because the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but

must also disclose those elements "arranged as in the claim."

5. Claim Rejections – 35 U.S.C. § 103 (a)

Claims 21, 33-35, and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ferris in view of Ghanea-Hercock (US 2004/0037423; Cited in IDS, same as WO 02/33547). As noted above, Ferris fails to disclose all of the elements in claims 20 and 37, from which claims 21, 33-35 and 38 depend. Ghanea-Hercock fails to overcome the deficiency of Ferris.

Ghanea-Hercock discloses a mobile agent computing system comprising at least one computer having a communications port running a host program for facilitating execution of a mobile program received via the port, the mobile program including identification data indicative of its type, identity or origin, in which the host program is arranged to test the mobile program for the possible presence of code which is inconsistent with the agent identification data, and to prevent execution of said inconsistent code. This invention is entirely irrelevant to the present invention, as it is not even in the context of a base station. The provisions cited by the Examiner are as follows:

[0105] One XML parser which may be suitable is the Voyager DXML product available from ObjectSpace Inc.

[0106] Below is the listing of a task list request message according to this embodiment:

[0107] Example Tasklist Request Message.

[0108] <?xml version="1.0"?>

[0109] <!DOCTYPE tasklist (View Source for full doctype
... »

[0110] <tasklist>

[0111] <task type="insert">

[0112] <insert>

[0113] <table>requisitions</table>

[0114] <column>demand</column>

[0115] <column>location</column>

[0116] <column>nsn</column>

[0117] <column>quantity</column>

[0118] <value>'btagent' </value>

[0119] <value>'btlabs' </value>

[0120] <value>4441</value>

[0121] <value>20</value>

[0122] </insert>

[0123] </task>

[0124] </tasklist>

[0127] Example of XML Formatted ACL Message.

[0128] Below is the above message in an XML format.

The Examiner states:

Therefore, taking the teachings of Ferris in combination of Ghanea-Hercock as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the monitor to receive the trigger signals, to read one or more tasks related to the trigger signals from the memory for advantages of performing to check whether each task attempted by the agent program conforms to the task data (Ghanea-Hercock: paragraph [0027]).

Ghanea-Hercock is irrelevant to the present invention and appears to have been chosen only to fill in some of the missing elements. It is impermissible within the framework of 35 U.S.C. 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 230 U.S.P.Q. 416 (Fed. Cir. 1986).

Ghanea-Hercock does not disclose the elements of the present invention. In rejecting claims for want of novelty or for obviousness, the Examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claims specified. 37 C.F.R. § 1.104(c)(2) (Emphasis added).

The combination of Ferris and Ghanea-Hercock would require the wholesale reconstruction of the Ferris invention. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious (See *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)). In *re Ratti*, the court reversed the rejection of a patent application holding the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." 270 F.2d at 813, 123 USPQ at 352.).

There is no motivation to combine Ferris with Ghanea-Hercock. The purported motivation to combine is just an improper restatement of a conclusion. *KSR International Co. v. Teleflex Inc.* (KSR) requires that an Examiner provide "some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness." (KSR Opinion at p. 14). An Examiner must "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does," (KSR Opinion at p. 15). And, the

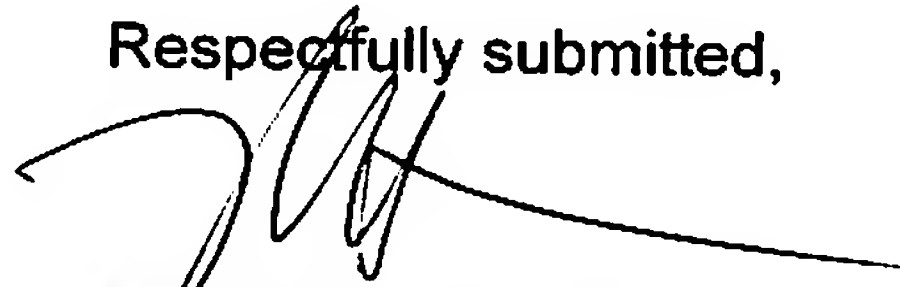
Examiner must make "explicit" this rationale of "the apparent reason to combine the known elements in the fashion claimed," including a detailed explanation of "the effects of demands known to the design community or present in the marketplace" and "the background knowledge possessed by a person having ordinary skill in the art." (KSR Opinion at p. 14). Anything less than such an explicit analysis is not be sufficient to support a prima facie case of obviousness. The Examiner's consideration of the amended claims is respectfully requested in light of the foregoing arguments and the allowance of all of the pending claims is respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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